



**THE GLOBAL EXPLORATION
STRATEGY:
THE FRAMEWORK FOR COORDINATION
(GES)**

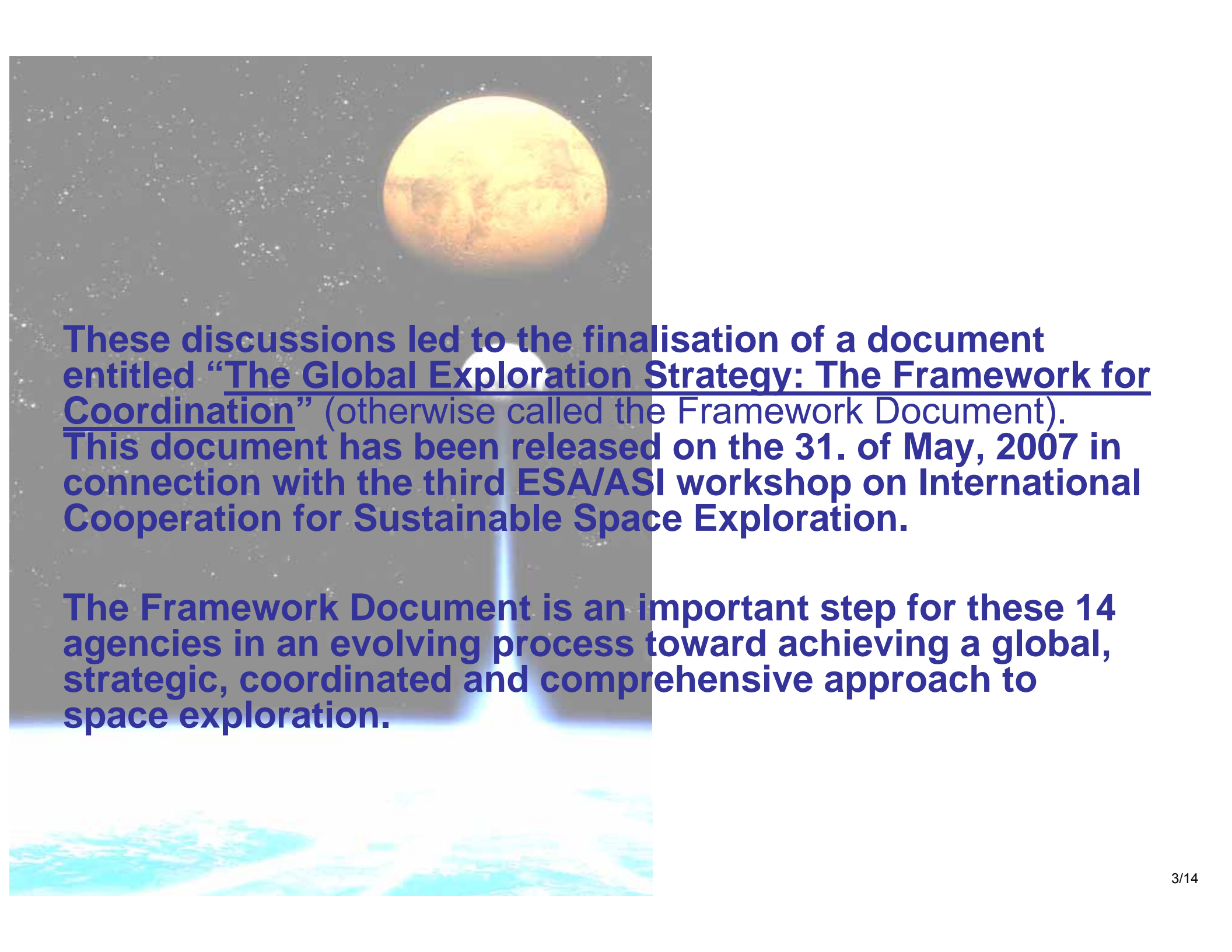
and

**INTERNATIONAL SPACE EXPLORATION
COORDINATION GROUP
(ISECG)**



Global exploration strategy: the framework for coordination

- **Since August 2006, 14 space agencies discussed the definition of a vision for globally coordinated space exploration.**
- **The 14 space agencies are: ASI, BNSC, CNES, CNSA, CSA, CSIRO, DLR, ESA, ISRO, JAXA, KARI, NASA, NSAU and Roscosmos.**



These discussions led to the finalisation of a document entitled “The Global Exploration Strategy: The Framework for Coordination” (otherwise called the Framework Document). This document has been released on the 31. of May, 2007 in connection with the third ESA/ASI workshop on International Cooperation for Sustainable Space Exploration.

The Framework Document is an important step for these 14 agencies in an evolving process toward achieving a global, strategic, coordinated and comprehensive approach to space exploration.



The Framework Document provides an extended rationale for Exploration.

The Framework Document identifies a common set of exploration themes and values. Exploration here deals with destinations where humans can live and work soon or later in the solar system: **Moon, Mars, Asteroids**

This Framework is not a proposal for a single global programme but it recognizes that individual space exploration activities can achieve more through coordination and cooperation

The Framework Document calls for a voluntary, non-binding coordination mechanism among interested space agencies.



Such a mechanism could provide participating agencies with:

- a forum to discuss their interests, objectives and plans in space exploration;
- a forum to promote space exploration.

Such a mechanism, through which nations can collaborate, could help to strengthen both individual projects and the collective effort related to Exploration.



Space exploration in service of society - Themes

Global-scale space exploration represents the sum of many projects undertaken nationally and internationally. But it also signifies a collective will to find answers to profound scientific questions, to create new economic opportunity and to expand the boundaries of human life beyond Earth. These goals of space exploration in the service of society are embodied in the recurring themes of the Global Exploration Strategy.



Space exploration in service of society - Themes

- **Theme 1: New knowledge in science and technology**
- **Theme 2: A sustained presence – extending human frontiers**
- **Theme 3: Economic expansion**
- **Theme 4: A global partnership**
- **Theme 5: Inspiration and education**



Moon, Mars and Beyond

1. The Moon – “a second home in the Solar System”

- **Science of the Moon, science from the Moon and science on the Moon**
- **The Moon as a place to develop capabilities to journey to Mars and beyond**
- **Sustain human presence beyond Earth**
- **The Moon to appeal human imagination**



2. To Mars and beyond

- **To increase our knowledge of Earth history and evolution also in relation with the appearance and evolution of life**
- **Mars has similarities with the Earth that makes it a destination for future sustained human presence**
- **Asteroids and comets have also high scientific interest**

Given the enormous challenges, human exploration of the Moon and Mars may only be achievable through sustained international cooperation

Robotic and crewed missions are considered complementary

A composite image showing a large orange planet (Mars) in the upper center, a smaller white planet (Moon) in the middle, and a blue and white planet (Earth) at the bottom. A bright blue beam of light originates from the Earth and points upwards towards the Moon. The background is a dark space filled with stars.

Implementing the Global Exploration Strategy

Through the definition of an international coordination mechanism for space exploration based on the following four principles:

- Openness and inclusiveness
- Flexibility and evolutionary approach
- Effectiveness
- Establishment of mutual interest



ISECG

- The decision to set up an “International Space Exploration Coordination Group” (ISECG) was taken and the approval of its Terms of Reference was made official by those Space Agencies at the GES meeting co-chaired by ESA and DLR in Berlin in November 2007.
- The purpose of ISECG is to work collectively toward the further development and implementation of the Global Exploration Strategy.
- The expected benefits of establishing the ISECG are to increase robustness, safety and cost effectiveness of individual and collective exploration goals, and to facilitate the ability of Participating Agencies to engage in productive bilateral or multi lateral discussions, while preserving their autonomy. This will contribute to strengthening the sustainability of global space exploration.

A vertical rectangular image on the left side of the slide. It features a dark space background with a large, orange, cratered planet (Mars) in the upper center and a smaller, white, cratered planet (Earth) in the lower center. A bright blue beam of light originates from the Earth and extends upwards towards the Mars. The bottom of the image shows a curved horizon of a blue and white planet, likely Earth, as seen from space.

ISECG (con't)

The ISECG will focus on developing non-binding findings, recommendations and other outputs as necessary by Participating Agencies.

The ISECG will also assist Participating Agencies by identifying the need for and benefits of establishing further elements of the international coordination mechanism, such as ad hoc working groups or workshops; or whether an issue should be referred to existing “experts” groups, for the purposes of providing analysis and advice to the ISECG.



ISECG (con't)

By the beginning of 2008, the group has finalized its Workplan for 2008 and the related products to be delivered.

The main activities planned for 2008 are:

- Development of recommendations regarding exploration infrastructure standards facilitating interoperability
- Development of Prototype version of the INTERnational Space Exploration Coordination Tool (INTERSECT)
- Enhancement of public engagement
- Definition of the Secretariat ToR
- Code-Sharing Payloads and Related Mediation Mechanism
- Development of relations with existing groups
- Development of an annual report



ISECG (con't)

- **Establishment of working relationships with relevant existing international working groups/ organisations: with regard to the latter task, a number of areas have already been identified which are of particular relevance for the objectives of ISECG and which would greatly benefit from close contact between ISECG and existing working groups.**
- **Examples of such activities include:**
 - Development of standards to support space exploration communications interoperability
 - Development of exploration data archiving and distribution standards
 - Development of a common Lunar cartographic reference system

ISECG meetings are scheduled twice a year: next in Japan in March 2009.